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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/584,096

05/31/2000

Sung Tae Kim

CIT/K-018A

4452

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01/13/2003

Fleshner & Kim LLP  
P O box 221200  
Chantilly, VA 20153-1200

EXAMINER

WILLIAMS, JOSEPH L

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 01/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/584,096

Applicant(s)

KIM, SUNG TAE

Examiner

Joseph L. Williams

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 7-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☒ Certified copies of the priority documents have been received in Application No. 09/058,293.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Please note that the transmittal has been amended by the Examiner to cancel claims 4-6, as opposed to claims 4-10, because as originally filed, claims 7-10 are not present.

Additionally, pre-amendment A has been entered, but claims 11-14 have been renumber as claims 7-10.

#### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/058,293, filed on 10 April 1998.

#### ***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Organic Electroluminescent Device with Trapezoidal Walls.

#### ***Claim Objections***

3. Claims 1-3 are objected to because of the following informalities: Regarding claim 1, line 6, the phrase "the substrate" lacks antecedent basis.

Due to their dependency, claims 2 and 3 are necessarily included in this objection.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagayama et al. (JP 08-227276), of record by Applicant.

6. Please note Nagayama et al. (US 5,742,129), also of record by the Applicant, appears to be an equivalent English translation of JP 08-227276, and thus will be referred to in the following rejections.

7. Regarding claim 1, Nagayama et al. ('129) teaches in figures 7, 13, and 14A-14C, an electroluminescent device (see figures 13 and 14A-14C) having a plurality of pixels (61) each with a first electrode stripe (51), an organic electroluminescent multilayer ((8) and column 7, line 64 through column 8, line 3) and a second electrode stripe (71), the device comprising: a partition wall (7) of an electrically insulating material

(column 8, lines 11-12) projected from each of the first electrode strips (51), the partition wall (7) having a trapezoidal structure with a base closer to the substrate (2) wider than a base away from the substrate, wherein portions of the second electrode (71) and the organic electroluminescent multiplayer (8) are formed such that any two adjacent pixels are electrically isolated (see figure 14C).

8. The Examiner notes that the claim limitation of the second electrode and the organic luminescence multilayer being formed by etching is drawn to a process of manufacturing, which is incidental to the claimed apparatus. It is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation is not afforded patentable weight (see MPEP 2113).

9. Regarding claim 2, Nagayama et al. ('129) teaches in column 8, lines 11-12 that the partition wall is formed of photo resist.

10. Regarding claim 3, Nagayama et al. ('129) teaches in figure 7 a first protective film (7a) formed only on each of the emitting pixels (the side of electrode (6) upon which an organic layer is placed thus forming a pixel) and a second protective film (column 8, lines 5-7) formed on the entire surface including on top of the first protective layer.

11. Regarding claim 7, Nagayama et al. ('129) teaches in figures 13 and 14A-14C an electroluminescent device comprising a first electrode layer having a plurality of electrode stripes (figure 14A) positioned on a substrate (2); a plurality of pixels ((61) in figures 13 and 14B) formed on the first electrode layer (51), and an array of partition walls (7), formed directly above and on the first electrode layer (51), and made of an electrically insulating material (see column 8, lines 11-12), the partition walls having a base closer to the substrate (2) wider than a base further from the substrate (2); wherein each partition wall (7) in the array of partition walls is positioned between at least two of the plurality of pixels (61), thereby electrically isolating the at least two pixels from each other. (also see column 8, lines 11-16).

12. Regarding claim 8, Nagayama et al. ('129) teaches in figure 7 a second protection layer (7a) on a surface of the plurality of electrically isolated pixels (the side of electrode (6) upon which an organic layer is placed thus forming a pixel).

13. Regarding claim 9, Nagayama et al. ('129) teaches the partition walls are formed of photo resist (see column 8, lines 11-12).

14. Regarding claim 10, Nagayama et al. ('129) teaches in figures 13 and 14A-14C each of the plurality of pixels comprising: an organic electroluminescent layer (8) having a first surface in contact with the side surfaces of the partition walls (7) (clearly seen in figure 11A) and the first electrode (51); a second electrode layer (71) having a first

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surface in contact with a second surface of the organic electroluminescent layer (8); and a first protection layer (column 8, lines 5-7) having a first surface in contact with a second surface of the second electrode layer (71), wherein each of the plurality of pixels (61) is positioned between at least two partition walls (7).

### ***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nagayama et al. (US 5,701,055) (see figure 7B), and Shi et al. (US 5,773,931) (see figure 7), both disclose organic EL devices with trapezoidal walls of which the base closer to the substrate is wider than a base away from the substrate.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Williams whose telephone number is (703) 305-1670. The examiner can normally be reached on M-F (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (703) 305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7382 for regular communications and (703) 308-7382 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

*Joseph Williams*

1/6/03

Joseph Williams  
Examiner  
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